

TABLE 1.—Averages, departures, and extremes of atmospheric pressure (sea level) at selected stations for the North Atlantic Ocean and its shores, October 1935

Station	Average pressure	Departure	Highest	Date	Lowest	Date
	Inches	Inch	Inches		Inches	
Julianehaab, Greenland.....	29.55	—	30.06	2	29.07	6
Reykjavik, Iceland.....	29.47	—0.21	30.01	20	28.83	8
Lerwick, Shetland Islands.....	29.46	—0.33	29.98	25	28.30	19
Valencia, Ireland.....	29.85	—0.06	30.38	17	28.87	3
Lisbon, Portugal.....	30.13	+0.11	30.54	23	29.63	4
Madeira.....	30.12	+0.13	30.33	28	29.89	4
Horta, Azores.....	30.34	+0.23	30.58	25	29.97	31
Belle Isle, Newfoundland.....	30.01	+0.14	30.80	30	29.48	26
Halifax, Nova Scotia.....	30.16	+0.12	30.68	30	29.64	19
Nantucket.....	30.18	+0.13	30.54	30	29.64	2
Hatteras.....	30.17	+0.11	30.48	17	29.79	3
Bermuda.....	30.06	—0.01	30.28	21, 29	29.84	16
Turks Island.....	29.94	—0.01	30.04	28, 29	29.82	19
Key West.....	29.98	+0.04	30.13	30	29.80	1
New Orleans.....	30.09	+0.06	30.34	25	29.85	3

NOTE.—All data based on a. m. observations only, with departures compiled from best available normals related to time of observation, except Hatteras, Key West, Nantucket, and New Orleans, which are 24-hour corrected means.

Cyclones and gales.—During the first few days, pressure was decidedly low in the region toward the British Isles. The storm center moved slowly southward until the 3d, then took a northeastward course, decreasing in energy. Several vessels east of mid-ocean noted forces 11 or 10, and the American motorship *Vistula* estimated force 12.

About the 15th a storm between Bermuda and the eastern coast of the United States developed much energy as it advanced northeastward. In connection with a marked high moving eastward over southern Canada, intense gales were met in the waters to southward or eastward of Nova Scotia; the American steamship *Executive* estimated force 12, the only occurrence of this force reported from Atlantic waters during the portion of the month after the 4th. It is possible, but not certain that this storm is the same as the one which caused the loss of the British steamship *Vardulia* on the 19th, near 58° N., 18°30' W. Reports by wireless to other craft in the vicinity indicated that the ship was being abandoned, but vessels that hastened to give assistance found no trace of the ship or crew. The storm center advanced eastward from near the position just stated, passing close to the Shetlands, and reaching the southern Scandinavian Peninsula late on the 19th with great intensity.

Along the chief steamship lanes, and particularly to northward of the fiftieth parallel, there were numerous gales on the last 2 days of October, chiefly near mid-ocean. At this time pressure was decidedly high near Labrador, and a marked low was centered near the British Isles.

Tropical storms.—The month began with an intense storm of tropical origin moving northward well north of Bermuda. Three vessels between the thirty-ninth and forty-fifth parallels of latitude estimated force 12 on the 1st, in connection with this storm, which was discussed at length in the September Review.

The closing fortnight of October saw the development and movement over an unusual path sharply recurved to the left, and finally the dissipation, of a moderately energetic hurricane in the western Caribbean region. Chart IX presents the situation on the 18th and, besides indicating the hurricane, shows the conditions several hundred miles south of Iceland, where the *Vardulia*, as already mentioned, was encountering severe weather.

Charts X, XI, and XII, for the 21st, 23d, and 25th, respectively, portray the further development and the unusual track of the Caribbean storm, which is fully described elsewhere in this issue. One small ship and crew was lost in the course of this hurricane, and much damage and loss of life occurred on the islands, largely because of floods.

Just before the month ended, a storm of considerable force, probably not of tropical origin but in all respects similar to the typical West Indian hurricane, appeared in the vicinity of Bermuda. This storm moved westward toward the North Carolina coast, and there took a most extraordinary course southward to pass over the northwestern Bahamas and southern Florida, in each of which regions there was much destruction and some loss of life. The disturbance finally died out about November 8, in the eastern Gulf of Mexico. A full account of this storm will appear in the next issue of the REVIEW.

Fog.—Fog showed the usual seasonal decrease as compared with conditions in September. The decrease between the thirtieth meridian and the coasts of the British Isles and Europe was notable.

The 5°-square from 40° to 45° N., 45° to 50° W., led in the number of days of fog, reporting 10, or practically normal for this locality.

To southward of Nova Scotia there was but little fog during October. In the northwestern Gulf of Mexico, however, the 23d brought the first fog noted over any Gulf waters for many months.

The British steamship *Berwindlea* grounded on a small island adjacent to Nova Scotia, probably on the 23d, during dense fog. Vessel and cargo of paper were a total loss.

OCEAN GALES AND STORMS, OCTOBER 1935

Vessel	Voyage		Position at time of lowest barometer		Gale began October	Time of lowest barometer October	Gale ended October	Lowest barometer	Direction of wind when gale began	Direction and force of wind at time of lowest barometer	Direction of wind when gale ended	Direction and highest force of wind	Shifts of wind near time of lowest barometer
	From—	To—	Latitude	Longitude									
NORTH ATLANTIC OCEAN													
Adria, Ger. M. S.	Baytown, Tex.	Hamburg	39 05 N.	64 00 W.	1	11a, 1	1	Inches 29.14	ENE	N, 11	WSW	NNW, 12	ENE-N-WNW
Eglantine, Am. S. S.	Houston	Havre	42 12 N.	59 32 W.	1	5p, 1	1	28.70	SE	SW, 12	WSW	WSW, 12	SSE-SW-WSW
Manhattan, Am. S. S.	Cobb	New York	44 00 N.	57 15 W.	1	11p, 1	2	29.15	ESE	SE, 11	W	SSE, 12	ESE-SSE-W
Emanuel Nobel, Belg. S. S.	Antwerp	do	49 22 N.	21 30 W.	2	8p, 2	3	29.31	W	W, 11	NNW	WNW, 11	W-WNW
Black Osprey, Am. S. S.	Rotterdam	do	50 32 N.	16 57 W.	2	Mdt, 2	3	29.00	WNW	NNW, 9	N	W, 10	W-WNW-N
Black Tern, Am. S. S.	New York	Antwerp	49 29 N.	17 39 W.	2	4a, 3	4	29.28	NW	WNW, 10	N	WNW, 10	NW - WNW-NW
Atlanta City, Am. S. S.	Cristobal	London	48 40 N.	10 00 W.	2	6a, 3	3	28.83	WNW	W, 10	N	NNW, 10	W-WNW
Vistula, Am. M. S.	Baytown, Tex.	Rotterdam	48 50 N.	11 13 W.	2	9a, 4	5	29.42	NNW	NNW, 11	N	NNW, 12	None
Imlay, Am. S. S.	Tampico	Baltimore	24 25 N.	80 58 W.	6	7a, 6	6	30.00	NE	NE, 4	NE	NE, 8	None
Kentucky, Dan. S. S.	Copenhagen	St. Johns, N. F.	55 10 N.	33 20 W.	7	10a, 6	7	29.70	WNW	WNW, 5	WNW	WNW, 10	Steady
Pres. Harrison, Am. S. S.	Gibraltar	New York	41 32 N.	65 22 W.	7	2p, 7	7	29.58	NE	NE, 9	NNW	NNE, 10	NE-N
Uganda, Br. S. S.	Glasgow	Montreal	56 20 N.	18 04 W.	8	Noon, 9	9	29.17	W	WNW, 7	WNW	WNW, 9	W-WNW
Caledonia, Br. S. S.	do	New York	55 18 N.	12 13 W.	10	2p, 10	10	29.11	W	W, 8	NW	NW, 8	W-WNW
Europa, Ger. S. S.	Cherbourg	do	47 32 N.	34 56 W.	11	11p, 11	12	29.58	SSW	SW, 9	W	SW, 9	SSW-SW-W
Uganda, Br. S. S.	Glasgow	Montreal	55 50 N.	35 04 W.	13	4a, 13	13	29.42	WSW	WSW, 9	WNW	WSW, 9	WSW-W
West Isles, Am. S. S.	Trinidad	Halifax	38 00 N.	63 48 W.	16	8p, 15	17	29.71	N	N, 6	NNE	N, 10	S-N
Rex, Ital. S. S.	Gibraltar	New York	38 10 N.	59 31 W.	16	2a, 16	16	29.20	W	SSW, 6	NNW	NNW, 8	S-SSW-NW
Executive, Am. S. S.	do	do	37 41 N.	59 49 W.	15	do	17	29.52	SE	SW, 7	NE	N, 12	SE-SW-WNW

¹ Position approximate.

OCEAN GALES AND STORMS, OCTOBER 1935—Continued

Vessel	Voyage		Position at time of lowest barometer		Gale began October	Time of lowest barometer October	Gale ended October	Lowest barometer	Direction of wind when gale began	Direction and force of wind at time of lowest barometer	Direction of wind when gale ended	Direction and highest force of wind	Shifts of wind near time of lowest barometer
	From—	To—	Latitude	Longitude									
NORTH ATLANTIC OCEAN—Continued													
Boston City, Br. S. S.	Halifax	Cardiff	45 45 N.	55 45 W.	16	3p, 16	17	29.56	N	NE, 9	N	NE, 10	NE-NNE.
San Bruno, Pan. S. S.	Cristobal	Charleston	21 42 N.	74 17 W.	17	4p, 17	18	29.87	NE	ENE, 5	NE	ENE, 7	NE-ENE-NE.
Europa, Ger. S. S.	New York	Cherbourg	38 18 N.	53 30 W.	17	Mdt, 17	18	29.51	N	N, 8	SE	N, 10	N-ESE.
Seatrail New York, Am. S. S.	New Orleans	Havana	25 10 N.	83 30 W.	17	4a, 18	17	29.95	E	E, 7	E	E, 8	
Helmstrath, Br. S. S.	Charleston	Liverpool	39 12 N.	51 40 W.	16	10a, 18	18	29.59	E	SE, 6	S	NE, 11	NE-S-SE.
Exochorda, Am. S. S.	New York	Gibraltar	39 43 N.	56 48 W.	17	3p, 18	18	29.54	NNE	SE, 8	SE	NE, 9	NE-SE.
Pres. Harding, Am. S. S.	do	Cobb	41 17 N.	58 10 W.	18	5p, 18	18	29.53	NE	E, 10	SE	NE, 10	NE-SE.
Amapala, Hond. S. S.	Pt. Cabezas	New Orleans	20 00 N.	85 30 W.	18	6p, 18	19	29.80	E	E, 6	E	E, 7	None.
Gulfqueen, Am. S. S.	Providence	Port Arthur	24 25 N.	81 50 W.	17	7p, 18	17	30.02	ENE	E, 6	ENE	ENE, 8	ENE-E.
Circe Shell, Br. M. S.	Houston	Montreal	24 16 N.	81 45 W.	18	7a, 19	18	30.03	E	E, 5	E	E, 8	None.
Black Heron, Am. S. S.	New York	Antwerp	43 10 N.	56 20 W.	18	2p, 19	19	29.14	ESE	SE, 9	SW	SE, 9	SE-W.
Forbes Hauptman, Am. S. S.	Norfolk	Colon	13 28 N.	77 46 W.	17	4p, 19	20	29.64	NE	SW, 6	SSW	SSW, 9	SW-SSW.
Boston City, Br. S. S.	Halifax	Cardiff	50 57 N.	31 02 W.	22	5a, 22	23	29.64	WNW	WNW, 5	NW	NW, 10	SW-NW-WNW
Afel, Am. S. S.	Victoria, Brazil	New Orleans	17 45 N.	80 25 W.	23	6a, 24	26	29.18	WSW	Calm	NE	SE, 9	SW-Calm-SE.
Jamaica Producer, Br. S. S.	London	Kingston	20 24 N.	71 48 W.	22	7a, 24	23	29.80	ESE	E, 2	ESE	ESE, 6	
New Brunswick, Br. S. S.	Conakry	Boston	35 32 N.	62 56 W.	25	2a, 25	25	29.87	N	N, 6	NNW	N, 8	SW-N.
Sinaloa, Hond. S. S.	New Orleans	Bluefields	14 55 N.	83 17 W.	24	4a, 25	25	29.50	NE	W, 7	SW	W, 7	N-W.
Contessa, Hond. S. S.	Colon	La Ceiba	15 16 N.	83 22 W.	25	do	26	29.37	NW	NNW, 9	WNW	NNW, 9	NW-NNE.
Terocero, Nor. M. S.	New York	Three Rivers	48 40 N.	63 30 W.	26	4a, 26	27	29.31	WSW	WSW, 8	W	NNW, 10	SW-WSW-NW.
City of Baltimore, Am. S. S.	Havre	Norfolk	45 10 N.	42 28 W.	26	8p, 26	26	29.52	S	W, 3	SW	S, 10	S-W-NW.
Montreal City, Br. S. S.	Bristol	Philadelphia	50 56 N.	31 21 W.	26	4a, 27	27	29.71	SSW	S, 9	SW	S, 9	S-SW.
Georgia, Dan. S. S.	Newcastle	New York	55 51 N.	29 50 W.	28	10a, 30	*1	29.28	W	NW, 8	NW	NNW, 11	
American Shipper, Am. S. S.	Belfast	Boston	53 20 N.	28 00 W.	29	7p, 30	31	29.23	W	NW, 9	NW	NW, 9	WNW-NW.
Queen of Bermuda, Br. S. S.	New York	Bermuda	33 00 N.	65 10 W.	30	1a, 31	31	29.53	N	WSW, 8	SSW	WSW, 8	NNE-WSW-S.
Montreal City, Br. S. S.	Bristol	Philadelphia	48 43 N.	43 25 W.	29	6a, 31	31	30.15	WSW	NW, 9	NW	NW, 9	N-NW.
Black Gull, Am. S. S.	Rotterdam	New York	49 58 N.	37 00 W.	29	8a, 31	31	29.72	WSW	NW, 8	NNW	NW, 9	NNW-NW.
Henri Jasper, Belg. S. S.	Antwerp	do	50 35 N.	32 45 W.	29	—, 31	*2	29.40	SW	NW, 10	NW	NNW, 10	NW-NNW.
NORTH PACIFIC OCEAN													
Tsuyama Maru, Jap. S. S.	Los Angeles	Yokohama	39 32 N.	157 25 E.	1	Noon, 1	1	29.38	SSW	W, 8	NW	W, 9	SSW-W-NW.
Steelmaker, Am. S. S.	do	Balboa	14 02 N.	95 45 W.	1	4a, 2	2	29.85	NE	NE, 8	NE	NE, 8	None.
Kyokuto Maru, Jap. M. S.	Yokohama	Los Angeles	41 30 N.	172 20 E.	2	2p, 2	2	29.30	SW	WSW, 8	WSW	WSW, 8	SW-WSW.
Jeff Davis, Am. M. S.	Honolulu	Manila	12 38 N.	126 40 E.	3	1p, 3	4	29.57	NNW	W, 9	W	W, 9	NW-W.
Pennsylvania, Am. S. S.	Cebu	San Francisco	25 30 N.	145 25 E.	5	3p, 5	5	29.52	NE	NE, 8	NE	NE, 8	NE-E.
Chester, U. S. N.	Honolulu	Yokohama	24 52 N.	164 46 W.	6	Noon, 6	6	29.91	NE	NE, 7	NE	NE, 8	ENE-NE.
Pres. Jefferson, Am. S. S.	Yokohama	Victoria, B. C.	43 10 N.	156 36 E.	8	4a, 8	9	29.04	W	N, 5	W	W, 10	E-NW.
Asia, Dan. M. S.	Ocean Falls	Yokohama	45 27 N.	158 52 E.	8	6a, 8	8	29.17	NW	NE, 7	W	W, 10	ENE-NE-NW
Bellingham, Am. S. S.	Taku Bar	Vancouver	49 44 N.	176 24 E.	8	10p, 8	9	29.30	SSW	S, 10	WSW	S, 10	S-SW.
Anna Maersk, Dan. M. S.	Balboa	Los Angeles	14 42 N.	96 14 W.	8	6a, 9	9	29.77	WNW	Shift, 8	ENE	NNE, 8	NNE-ENE.
General Sherman, Am. S. S.	Yokohama	San Francisco	45 02 N.	174 12 W.	12	4a, 13	13	29.81	SSE	S, 8	SSW	S, 9	S-SSW.
Pres. Jefferson, Am. S. S.	do	Victoria, B. C.	49 42 N.	136 30 W.	11	3a, 14	13	29.69	NW	NW, 6	NW	NW, 9	None.
Diamond Head, Am. S. S.	Bellingham	Honolulu	43 32 N.	133 59 W.	13	8p, 13	14	29.68	W	WSW, 6	W	W, 9	SW-W.
Pres. Grant, Am. S. S.	Seattle	Yokohama	49 30 N.	129 00 W.	17	2p, 17	17	29.75	SSW	W, 9	W	SSW, 9	SSW-W.
Tantalus, Br. M. S.	Yokohama	Vancouver	42 47 N.	154 53 E.	18	4a, 19	19	29.63	E	SE, 9	SE	SE, 9	None.
General Sherman, Am. S. S.	do	San Francisco	35 03 N.	123 12 W.	19	8a, 20	20	30.04	NNW	NNW, 8	NNW	NNW, 8	
Soyo Maru, Jap. M. S.	do	Los Angeles	44 24 N.	148 39 W.	20	8a, 21	20	29.93	E	SSW, 7	SE	E, 9	SE-SSW.
Shelton, Am. S. S.	Sagay	do	41 06 N.	169 40 W.	21	4a, 22	25	29.29	NNE	N, 2	NNE	N, 9	W-N-NNE.
Takaoka Maru, Jap. S. S.	Yokohama	Honolulu	34 20 N.	156 45 E.	24	4a, 25	28	29.28	ENE	S, 9	W	—, 10	E-S-WSW.
Forbes Hauptman, Am. S. S.	Balboa	Los Angeles	15 06 N.	95 52 W.	25	2p, 26	26	29.68	NW	NNW, 10	NNE	NNW, 10	NNW-NNE.
Empress of Asia, Br. S. S.	Vancouver	Yokohama	47 43 N.	163 00 E.	27	4a, 27	27	29.33	N	N, 8	NNW	N, 9	NE-N.
Californian, Am. M. S.	Balboa	Los Angeles	14 07 N.	93 12 W.	27	do	27	29.64	NW	NW, 5	NNE	N, 8	WNW-NNW.
Hikawa Maru, Jap. M. S.	Yokohama	Vancouver	47 56 N.	176 40 E.	26	10a, 27	29	28.45	NE	SSW, 9	SE	SSW, 9	SE-SSW-S.
Yeiyo Maru, Jap. S. S.	Maizuru	San Francisco	41 37 N.	141 00 E.	27	8a, 28	28	29.43	E	E, 8	SSE	E, 8	E-SSE.
Golden Mountain, Am. S. S.	Tandoc	do	38 12 N.	160 15 W.	27	7p, 29	29	29.78	E	W, 2	E	E, 10	E-W.
Shelton, Am. S. S.	Sagay	Los Angeles	37 30 N.	149 55 W.	28	4p, 27	30	29.72	E	ESE, 6	SE	E, 10	ENE-ESE-E.
Pres. Jackson, Am. S. S.	Yokohama	Victoria	49 50 N.	136 00 W.	28	2a, 29	29	29.92	NNW	NNW, 7	NNW	NNW, 10	NNW-ENE.

1 Position approximate.

* November.

NORTH PACIFIC OCEAN, OCTOBER 1935

By WILLIS E. HURD

Atmospheric pressure.—The outstanding feature of the pressure situation over the North Pacific Ocean during October 1935 was the high barometer throughout the Aleutian and adjacent regions. At Dutch Harbor, pressure was higher than 30 inches on 20 days of the month. The average pressure at this station, 30.09 inches, was 0.44 inch above the normal, which figure is by far the highest October average in many years of record. A similar statement holds true of St. Paul and

Kodiak, with departures from the normal of +0.42 and +0.36, respectively. Plus departures of less values occurred far to the southward along the American coast.

As an average condition, no Aleutian low was existent this month. Such average oceanic depression as occurred in the extra-tropics lay to the southward of the Aleutians, along the western half of the northern steamship routes.

The barometric situation in the Tropics was practically normal, except for a departure of -0.06 at Honolulu, and of +0.07 at Naha, in the Nansei Islands, where the effect of the Asiatic anticyclone was felt more strongly than usual for the season.